

0013

552342

15 MR. COBURN: John, J-o-h-n, Cobourn,  
16 C-o-b-o-u-r-n.

17 MR. WARD: Just go ahead and make your comment  
18 when you are ready, sir.

19 MR. COBURN: Okay. I have a concern about the  
20 earthquake faults at Yucca Mountain. Does the mapping of  
21 the earthquake faults show all the possible fracture  
22 zones?

23 Is it possible that a future earthquake could  
24 create a new fracture that would go through the  
25 emplacement tunnel? Can this question be answered with

0014

1 current geological methods?

2 Could a fracture of a fault within Yucca  
3 Mountain break open the emplacement of the waste material?

4 Would there be an increased risk of -- I don't  
5 know if the word is radiation or radioactivity. What's  
6 the hazardous leak, radiation, radioactivity, radioactive  
7 material?

8 MR. WARD: Radioactive material.

9 MR. COBURN: So, would there be possible  
10 increased risks of a leak of radioactive material?

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552342

11           Could the pathway for a leakage after an  
12 earthquake include both a surface leak, as well as  
13 groundwater contamination? That's the end of that  
14 question.

15           The second question: Can geologists determine  
16 the possibility of a rise in the groundwater table and the  
17 frequency with which the groundwater table might rise or  
18 fall beneath the repository?

19           I understand that some scientists claim the  
20 water table was as high as the repository in the past.  
21 Can we determine the probability of how close the water  
22 table could get to the repository or how often the water  
23 table would rise to the level of the repository during the  
24 next 10,000 years?

25           Third question: What would be the environmental

0015

1 consequences to flora and fauna, including human beings,  
2 for each of the above two catastrophic scenarios, that is,  
3 an earthquake which fractures the repository walls and/or  
4 increased levels of the water table combined with  
5 radioactive contamination of the saturated zone of the  
6 aquifer?

7           For example, what if an earthquake fractured the

**552342**

8 repository walls in 100 or 500 years, causing migration of  
9 radioactive material into the saturated groundwater zone  
10 and high levels of radioactive material reached  
11 groundwater discharge zones or wells in 500 or 1,000  
12 years, would the environmental damage be limited to a  
13 small area within the basin or could radioactive  
14 contamination travel across the surface of the land or  
15 into the atmosphere?

16       Final question: What is the most catastrophic  
17 scenario for compromise of the waste storage facility?  
18 Have scientists extrapolated environmental damages from a  
19 catastrophic accident or leak to their maximum geographic  
20 and biological extent? That's it.